

CERTIFICATE OF ANALYSIS

Vegetable Glycerine EP/USP Grade

Product: Batch No.: Manufacturing Date: Best Before:

4482401 September 2022 September 2025

Country of Origin:

Various EU Countries

PARAMETER	UNIT	MIN	MAX	RESULT
Acidity or Alkalinity	mL 0.1M NaOH		0.2	< 0.2
Colour Apha			10	< 5.0
Esters	mL 0.1M HC1	8		8.1
Glycerin	% wt/wt	99.5	101.0	99.8
Moisture Content, (m/m)	%		0.5	< 0.1
Refractive Index at 20°C		1.470	1.475	1.474
Aldehydes	ppm		10	< 10.0
Appearance Clear		Clear		Clear
Appearance Colourless		Colourless		Colourless
Chloride	ppm		10.0	< 10.0
Diethylenglycol Impurity A			0.1	< 0.1
Halogenated Compounds	ppm		35	< 35.0
Heavy metals	ppm		5	< 5.0
Identification A		Pass		Pass
Identification B		Pass		Pass
Impurity Rt < Rt Glycerol	%		0.1	< 0.1
Odour		Odourless		Odourless
Relative Density D20/20		1.260		1.263
Sugars		Pass		Pass
Sulphated Ash (600+/- 50°C)	%		0.01	< 0.01
Total impurities Rt>RtGlycerol	%		0.5	< 0.5

The goods detailed above and the tests specified have been provided by the manufacturer of the product as supplied to Madar Corporation Limited

Madar Corporation Limited makes the limited warranty that at the date of delivery this product will be free from defects in materials and workmanship.

No warranty of merchantability, fitness for any use, or any other warranty is expressed or to be implied, regarding the accuracy of this data. The results to be obtained from the use thereof, or the hazards connected with the use of this product.

Lubrisolve Engineering Solutions Ltd. assumes no liability for any alleged ineffectiveness of the product or any injury or damage, direct or consequential, resulting from the use of this product unless such injury or damage is solely attributable to negligence on the part of Madar Corporation Limited.

The user of the product is solely responsible for compliance with all laws and regulations applying to the use of the products, including intellectual property rights of third parties.



ALLERGEN DECLERATION

Product : Vegetable Glycerine EP/USP Grade

Annex Illa		CAS Number	Total Allergen
reference			Inclusion %
67	Amyl cinnamal	122-40-7	0.00
68	Benzyl alcohol	100-51-6	0.00
69	Cinnamyl alcohol	104-54-1	0.00
70	Citral	5392-40-5	0.00
71	Eugenol	97-53-0	0.00
72	Hydroxy-citronellal	107-75-5	0.00
73	Isoeugenol	97-54-1	0.00
74	Amylcin-namyl alcohol	101-85-9	0.00
75	Benzyl salicylate	118-58-1	0.00
76	Cinnamal	104-55-2	0.00
77	Coumarin	91-64-5	0.00
78	Geraniol	106-24-1	0.00
79	Hydroxy-	31906-04-4	0.00
	methylpentylcyclohexenecarboxaldehyd		
80	Anisyl alcohol	105-13-5	0.00
81	Benzyl cinnamate	103-41-3	0.00
82	Farnesol	4602-84-0	0.00
83	Butylphenyl Methylpropanol	80-54-6	0.00
84	Linalool	78-70-6	0.00
85	Benzyl benzoate	120-51-4	0.00
86	Citronellol	106-22-9	0.00
87	Hexyl cinnam-aldehyd	101-86-0	0.00
88	Limonene	5989-27-5	0.00
89	Methyl heptin carbonate	111-12-6	0.00
90	Alpha-Isomethyl Ionone	127-51-5	0.00
91	Oak Moss Extracts (Evernia Prunastri Extract)	90028-68-5	0.00
92	Tree Moss Extracts (Evernia Furfuracea extract)	90028-67-4	0.00

March 2020.



CMR STATEMENT

Product: Vegetable Glycerine EP/USP

Vegetable Glycerine EP/USP which is supplied by Lubrisolve Engineering Solutions Ltd Is not classified as CMR Substance (carcinogenic, mutagenic or toxic for reproduction), in accordance with the current European Regulation (EC) No. 122312009 of the European Parliament and of the council of 30th November 2009 on cosmetic products.

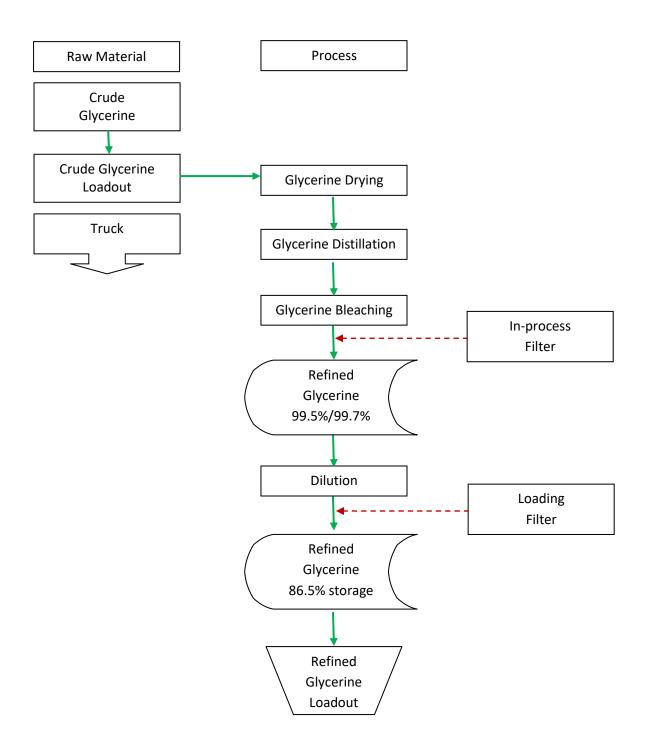
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MANUFACTURING FLOW CHART

1.1 PRODUCT NAME: Glycerine Synonyms: 1,2,3 Propanetriol Glycerol Glycyl Alcohol INCI name: Glycerin REACH Registered No. Exemption under Annex V. CAS No. 56.81.5 EC No. 200-289-5







GMO STATEMENT

Product: Vegetable Glycerine EP/USP Grade

We hereby declare that Vegetable Glycerine EP/USP Grade not especially named as GMO are derived from non-GMO raw materials.

We hereby confirm that the conventional refined and crude glycerine products are not subject to the labelling requirements specified in the below mentioned regulations unless specifically sold and delivered as genetically modified (GMO) and consequently labelled accordingly.

Regulation (EC) No 1829/2003 of the European Parliament and Council on September 22nd 2003 on genetically modified food and feed, as amended Regulation (EC) no 1830/2003 of the European Parliament and Council on September 22nd 2003 concerning the traceability and labelling genetically modified organisms and the traceability of food and feed products produced genetically modified organisms and amending directive 2001/18/EC, as amended.

March 2020.



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IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY NAME 1. **1.1 PRODUCT NAME:** Glycerine Synonyms: 1,2,3 Propanetriol Glycerol Glycyl Alcohol Vegetable Glycerine EP/USP Grade 99.5% Min, Vegetable Glycerine Ph. Eur Grade E422 **INCI** name: Glycerin **REACH Registered No.** Exemption under Annex V. CAS No. 56-81-5 EC No. 200-289-5 **1.2 RELEVANT IDENTIFIED USES OF THE SUBSTANCE OR MIXTURE AND USES ADVISED AGAINST:** Relevant identified uses of the substance or mixture: Additive in detergents, body washing products, cosmetics and other industrial/commercial uses. Feed and food additives. Uses advised against: No data available. **1.3 DETAILS OF THE SUPPLIER:** Madar Corporation Limited 19 - 20 Sandleheath Industrial Estate Fordingbridge SP6 1PA Tel. +44 (0)1425 655 555 e-mail: technical@madarcorporation.co.uk

2. HAZARDS IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE:

This product does not meet the classification and labelling criteria given in the Regulation (EC) No. 1272/2008 (CLP) **2.2. LABEL ELEMENTS:** This product has no label elements. **2.3 OTHER HAZARDS:**

No data available.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1. CHEMICAL IDENTITY: Glycerine. CAS REGISTRY NO.: 56-81-5. EINECS NO.: 200-289-5.



4. FIRST AID MEASURES

4.1. DESCRIPTION OF FIRST AID MEASURES:

General Information:

In case of persistent adverse effects, consult a physician. Remove contaminated clothing and shoes immediately, and launder thoroughly before re-using.

Eye contact:

Remove contact lenses. Rinse eye thoroughly under running water keeping eyelids wide open and protecting the unaffected eye (at least 10 to 15 minutes). Seek medical assistance.

Skin contact:

In case of contact with skin wash off immediately with soap and water.

Ingestion:

Rinse out mouth and give plenty of water to drink. Do not induce vomiting. Never give anything by mouth to an unconscious person.

Inhalation:

Ensure supply of fresh air. Remove affected person from the immediate area.

4.2 MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:

No data available.

4.3 INDICATION OF ANY IMMEDIATE/SPECIAL TREATMENT NEEDED: No data available.

No data available.

5. FIRE FIGHTING MEASURES

5.1 EXTINGUISHING MEDIA:

Suitable extinguishing media:

Carbon dioxide; Alcohol-resistant foam; Dry chemical extinguisher; Water spray jet

Unsuitable extinguishing media:

High power water jet.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE:

In the event of fire, the following can be released: Carbon monoxide and carbon dioxide.

5.3 PROTECTION FOR FIRE-FIGHTERS:

Protective actions during firefighting:

Use self-contained breathing apparatus. Wear protective clothing. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:

For non-emergency personnel

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation. High risk of slipping due to leakage/spillage of product.

For emergency responders

No data available. Personal protective equipment (PPE) - see Section 8.

6.2 ENVIRONMENTAL PRECAUTIONS:

Do not discharge into the subsoil/soil. Do not discharge into the drains/surface waters/groundwater.

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6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:

Pick up with absorbent material (e.g., sand, kieselguhr, acid binder, universal binder, sawdust).

6.4 REFERENCE TO OTHER SECTIONS

No data available.

7. HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING:

Advice on safe handling

Provide good ventilation at the work area (local exhaust ventilation, if necessary). Avoid eye, skin and clothing contact.

General protective and hygiene measures

Do not eat, drink or smoke during work time. Wash hands before breaks and after work. Avoid contact with eyes and skin.

7.2 CONDITIONS FOR SAFE STORAGE:

Technical measures and storage conditions:

Keep container tightly closed and dry in a cool, well-ventilated place.

Requirements for storage rooms and vessels:

Keep only in the original container.

Incompatible products:

Do not store together with: oxidizing agents; Alkalis

7.3 SPECIFIC END USES:

No data available.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 CONTROLPARAMETERS:

No parameters available for monitoring.

8.2 EXPOSURE CONTROLS

Appropriate engineering controls

No data available.

Personal protective equipment:

Respiratory protection

If workplace exposure limits are exceeded, a respiration protection approved for this particular job must be worn. In case of aerosol and mist formation, take appropriate measures for breathing protection in the event workplace threshold values are not specified.

Eye / face protection

Tightly fitting safety glasses (EN 166).

Hand protection

In case of intensive contact, wear protective gloves (EN 374). Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product. Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.



Appropriate Materialbutyl rubberAppropriate Materialnitrile rubberOtherNormal chemical work clothing.Environmental exposure controlsNo data available.

9. PHYSICAL AND CHEMICAL PROPERTIES

Liquid
Colourless
Odourless.
Negligible.
Non-oxidising by EC criteria.
Soluble.
1300-1500 mPa s.
290.
No data available.
175.
400.
~18.
1 hPa @ 20°C.
1 hPa @ 50°C.
No data available
Completely miscible

10. STABILITY AND REACTIVITY

10.1 REACTIVITY: No data available.
10.2 CHEMICAL STABILITY: Stable under recommended storage and handling conditions (See section 7).
10.3 HAZARDOUS REACTIONS: No information available.
10.4 CONDITIONS TO AVOID: Heat; Protect from sun.
10.5 MATERIALS TO AVOID: Oxidizing agents; Alkalis.
10.6 HAZARDOUS DECOMPOSITION PRODUCTS: No data available. SHEET 4 of 8



11. TOXICOLOGICAL INFORM	ATION
11.1 INFORMATION ON TOXICOLO	GICAL EFFECTS:
Oral:	
Acute toxicity oral (LD ₅₀ mg/kg):	2000
Species:	Rat
Dermal:	
No data available.	
Acute inhalational toxicity:	
No data available	
Skin corrosion/irritation:	
No data available	
Serious eye damage/irritation:	
No data available.	
Germ cell mutagenicity:	
No data available.	
Reproduction toxicity:	
No data available.	
Carcinogenicity:	
No data available.	
STOT-single exposure:	
No data available.	
STOT-repeated exposure:	
No data available.	
Aspiration hazard:	
No data available.	
-	well as chronic effects from short and long-term exposure:
A sensitisation is possible for perso irritation.	ns who are sensitive. Eye contact with the product may cause slight
11.2 INFORMATION ON OTHER HA	74005
Endocrine disrupting properties	IZANDS.
No data available.	
Other information	
No data available.	
12. ECOLOGICAL INFORMATIO	ON
12.1 TOXICITY:	
Toxicity to fish (acute)	
LC50 > 5000 mg/l	
Toxicity to fish (chronic)	
No data available	
Toxicity to Daphnia (acute)	
No data available	
Toxicity to Daphnia (chronic)	

No data available

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Toxicity to algae (acute) No data available **Toxicity to algae (chronic)** No data available **Bacteria toxicity** No data available **12.2 PERSISTENCE AND DEGRADABILITY: Biodegradability:** Biodegradable **12.3 BIOACCUMULATIVE POTENTIAL:** No data available **12.4 MOBILITY IN SOIL:** No data available. 12.5 RESULTS OF PBT and vPvB ASSESSMENT: No data available. **12.6 ENDOCRINE DISRUPTING PROPERTIES:** No data available. **12.7 OTHER ADVERSE EFFECTS:** No data available. **12.8 OTHER INFORMATION:**

Do not discharge product unmonitored into the environment.

13. DISPOSAL CONSIDERATIONS

13.1 WASTE TREATMENT METHODS:

General information:

Waste should be treated as controlled waste. Do not puncture or incinerate, even when empty.

Disposal methods:

Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Packaging:

Packaging that cannot be cleaned should be disposed off as product waste. Uncontaminated packaging may be taken for recycling.

14. TRANSPORT INFORMATION

14.1. TRANSPORT ADR/RID/ADN:

The product is not subject to ADR/RID/ADN regulations.

14.2 TRANSPORT IMDG:

The product is not subject to IMDG regulations.

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14.3 TRANSPORT ICAO-TI / IATA: The product is not subject to ICAO-TI / IATA regulations.
14.4 OTHER INFORMATION: No data available.
14.5 ENVIRONMENTAL HAZARDS: Information on environmental hazards, if relevant, please see 14.1 - 14.3.
14.6. SPECIAL PRECAUTIONS FOR USER: No data available.
14.7. MARITIME TRANSPORT IN BULK ACCORDING TO IMO INSTRUMENTS:

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

15. REGULATORY INFORMATION

15.1 SAFETY, HEALTH AND ENVIRONMENTAL REGULATIONS/LEGISLATION SPECIFIC FOR THE SUBSTANCE OR MIXTURE:

Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation):

In accordance with the REACH regulation (EC) 1907/2006, the product does not contain any substances that are considered as subject to listing in annex XIV, inventory of substances requiring authorisation.

REACH candidate list of substances of very high concern (SVHC) for authorisation

In accordance with article 57 and article 59 of the Reach regulation (EC) 1907/2006, this substance is not considered as subject to listing in annex XIV, inventory of substances requiring authorisation ("Authorization list").

Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, MIXTURES AND ARTICLES

The substance is not subject to the provisions of annex XVII (restriction entries) of the Reach regulation (EC) 1907/2006.

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances This substance is not subject to Part 1 or 2 of Annex I

15.2 CHEMICAL SAFETY ASSESSMENT:

No chemical safety assessment has been carried out.

16. OTHER INFORMATION

This safety data sheet is prepared in accordance with Commission Regulation (EU) No. 1907/2006 (REACH), 1272/2008 (CLP) as amended, EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU.

Sources of key data used to compile the data sheet:

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

Directives 2000/39/EC, 2006/15/EC, 2009/161/EU, (EU) 2017/164.

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding section.



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DATE : 17/09/21 REVISION 1.00 29/09/2022 Glycerine

Legal disclaimer:

The information provided in this safety data sheet is correct to the best of our knowledge at the time of publication. It is given in good faith but no warranty is implied with respect to the quality and specification of the product. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

The customer must satisfy themselves that the product is entirely suitable for their own purposes.

Although certain hazards may be described we cannot predict that these are the only hazards, or combination of hazards, that may exist in a workplace. This MSDS, therefore, forms a component only of a risk assessment carried out by, or on behalf of, the user.



VEGETABLE GLYCERINE

Technical Data

Assay (as Glycerine)	99.5% w/w min.	
Colour	10 Alpha max.	
Appearance	Clear viscous liquid	
Relative density	~1.26g/ml @20°C	
CAS No.	56-81-5	
EINECS No.	200-289-5	
INCI Name	Glycerin	
Origin	Vegetable	

Product Specification

Property	Method	Unit	Range
Acidity or Alkalinity	Ph.Eur. (01/2019/0496)	mL 0.1M NaOH	max 0.2
Esters	Ph.Eur. (01/2019/0496)	mL 0.1M HCL	min 8.0
Moisture Content Karl Fischer	Ph.Eur. (01/2019/0496)	%	max 0.5
Aldehydes	Ph.Eur. (01/2019/0496)	ppm	max 10
Chlorides	Ph.Eur. (01/2019/0496)	ppm	max 10
Diethylenglycol Impurity A	Ph.Eur. (01/2019/0496)	%	max 0.1
Halogenated compounds	Ph.Eur. (01/2019/0496)	ppm	max 35
Heavy metals as Pb	Ph.Eur. (2.4.8)	ppm	max 5
Identification A (Refractive	Ph.Eur. (01/2019/0496)		1.470-1.475
Index at 20°C)			
Identification B	Ph.Eur. (01/2019/0496)		Pass
Impurity Rt < Rt Glycerol	Ph.Eur. (01/2019/0496)	%	max 0.1
Sugars	Ph.Eur. (01/2019/0496)		Pass
Sulphated Ash (600+/- 50°C)	Ph.Eur. (01/2019/0496)	%	max 0.01
Total impurities Rt > Rt	Ph.Eur. (01/2019/0496)	%	max 0.5
Glycerol			



Product is manufactured to meet both the European pharmacopoeia (EP) and United States pharmacopoeia (USP) specifications. It is manufactured to be Kosher and Halal certified.

Our glycerine is also produced without the use of raw materials originating from the Jatropha plant or its oils - the Jatropha plant is classified as a noxious weed in some countries. The oil produced from the Jatropha plant contains carcinogenic substances and presents a significant human and animal health risk.

Our glycerine has not been tested on animals.

In addition to this the product fulfils the requirements of EC Directive 2007/68/EC stating the allowed content of allergenic substances of foodstuff ingredients. Hence it does not contain any allergenic substances of Appendix III such as:

Gluten containing grain

Shellfish and obtained products

Eggs and obtained products

Fish and obtained products

Peanuts and obtained products

Soybeans and obtained products

Milk and out of milk obtained products

Edible nuts such as almonds (Amygdalus communis L.), Hazel nuts (corylus avellana),

Walnuts (juglans regia), Cashew nuts (Anarcardium occidentale), Pecans (Carya illinoiesis (Wangenh) K. Koch), Para nuts (Bertholettia excelsa),

Pistachios (pistacia vera), Macadamia nuts and Queensland nuts (macadamia ternifolia)

and obtained products

Celery and obtained products

Mustard and obtained products

Sesame seed and obtained products

Sulphur dioxide and sulphite in concentrations higher than 10mg/kg or 10mg/l, as SO₂

Lupins and obtained products

Molluscs and obtained products

The content of this data sheet is given in good faith and without warranty.

Issue 15.06.17 Revision No 2.00 Date last revision: 29.09. 2022



DECLERATION AND CONFORMITY VEGAN INGREDIENT STATEMENT

Product: Vegetable Glycerine EP/USP Grade

Madar Corporation Limited, declare that the raw materials listed below may be considered vegan according to the following definitions:

1) Vegetable Glycerine is derived from vegetable oil and free from animal, animal parts or derivates.

2) Therefore, our product is suitable for Vegans, Vegetarians, Ovo Vegetarians, Lacto Vegetarians and Lacto-Ovo Vegetarians.